




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION IX LABORATORY
1337 S. 46TH STREET
BLDG. 201
RICHMOND, CA 94804-4698**

AUG 19 2009

MEMORANDUM

SUBJECT: Case R99S42
Results for Perchlorate Analysis

FROM: 
Brenda Bettencourt, Director
EPA Region 9 Laboratory (PMD-2)

TO: Craig Cooper, Remedial Project Manager
Hawaii, Nevada, California Cleanup Section (SFD-7-4)

Attached are the report narrative and results spreadsheet from analysis of samples from the Newmark Superfund site. These data have been reviewed in accordance with EPA Region 9 Laboratory policy. Summary information for the data included in this report is as follows:

SITE/PROJECT:	Newmark
CASE:	R99S42
LABORATORY:	U. S. EPA Region 9 Laboratory
SAMPLE DELIVERY GROUP:	99210A
ANALYSIS:	Perchlorate (R9 Lab SOP 531)

A full documentation package for these data, including raw data and sample custody documentation, has been prepared and sent to the Quality Assurance Program (PMD-3). Please contact Vance Fong for information regarding review and/or validation of the data.

If you have any questions please contact Rich Bauer at (510) 412-2312, or Ken Hendrix at (510) 412-2321.

ATTACHMENT: Analytical Report

USEPA REGION 9 LABORATORY
REPORT NARRATIVE

CASE NUMBER:	R99S42
SAMPLE DELIVERY GROUP:	99210A
PROGRAM:	SUPERFUND
DOCUMENT CONTROL #:	ESTW-9B-2383
DATE:	08/16/99
ANALYSIS:	PERCHLORATE

<u>SAMPLE ID</u>	<u>LABORATORY SAMPLE ID</u>
50120	AB23275
50122	AB23276
50110	AB23277
50119	AB23278
50116	AB23279
50117	AB23280
50124	AB23282
50125	AB23283
50109	AB23285
50123	AB23286
50114	AB23287
50130	AB23288
50121	AB23289
50112	AB23290
50111	AB23291
50115	AB23292
50113	AB23293

GENERAL COMMENTS

Seventeen water samples were received from the Newmark Source OU Superfund project on 07/29/99.

The requested analysis was perchlorate by R9 Lab SOP 531. All samples were analyzed within the required technical holding time.

SAMPLE RECEIPT AND PRESERVATION

The temperature of the shipping cooler was 8°C when measured upon receipt. No other shipping or preservation problems were encountered with these samples.

ANALYTICAL COMMENTS

The requirements of the method were adhered to and all QA/QC criteria for perchlorate were met.

QA/QC SUMMARY

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

No analyte was detected in the blank associated with this SDG.

Laboratory Fortified Matrix Spike (LFM) and Laboratory Duplicate Analysis (QC Sample:50124)

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

The LFM recovery was within the 75-125% method QC limits. The RPD for the duplicate was less than or equal to the QC limit of 20% for perchlorate where the sample result was greater than or equal to 5 times the quantitation limit. For perchlorate where the sample result was less than 5 times the quantitation limit the difference between the duplicates was less than the quantitation limit, as required by the method.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

The LFB recovery was within the method QC limits.

All other method QC criteria were met.

Questions concerning the data can be answered by Patrick Hirata at (510) 412-2354.

**USEPA REGION 9 LABORATORY
QUALIFIER DEFINITIONS FOR INORGANIC SAMPLE RESULTS**

- U** The analyte was analyzed for, but was not detected above one half the Quantitation Limit (QL). The reported value is the QL for all analytes.

- J** The reported value was obtained from a reading that was less than the Quantitation Limit (QL) but greater than or equal to one half the QL. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

EPA REGION 9 LABORATORY-RICHMOND, CA
SUMMARY OF ANALYTICAL RESULTS

Case Number: R99S42
Site: Newmark Source OU
SDG: 99210A
Date: 08/16/99

Analysis: Perchlorate
Matrix: Water

Sample No.	CJ-13		CJ-15		CJ-1A		CJ-12		CJ-11		CJ-11		CJ-17	
Sample I.D.	50120		50122		50110		50119		50116		50117		50124	
Lab Sample I.D.	AB23275		AB23276		AB23277		AB23278		AB23279		AB23280		AB23282	
Date of Collection	07/26/99		07/26/99		07/26/99		07/26/99		07/26/99		07/26/99		07/26/99	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Perchlorate	5	U	5	U	5	U	5	U	5	U	5	U	5	U

Q - Laboratory Data Qualifiers; Refer to EPA Region 9 Laboratory Qualifier Definitions

QL - Quantitation Limit

Sample No.	CJ-17		CJ-1		CJ-16		CJ-8		CJ-6		CJ-14		CJ-3	
Sample I.D.	50125		50109		50123		50114		50130		50121		50112	
Lab Sample I.D.	AB23283		AB23285		AB23286		AB23287		AB23288		AB23289		AB23290	
Date of Collection	07/26/99		07/27/99		07/27/99		07/27/99		07/27/99		07/27/99		07/27/99	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Perchlorate	5	U	5	U	5	U	5	U	5	U	5	U	5	U

Q - Laboratory Data Qualifiers; Refer to EPA Region 9 Laboratory Qualifier Definitions

QL - Quantitation Limit

Sample No.	CJ-2		CJ-10		CJ-7		N/A		N/A	
Sample I.D.	50111		50115		50113		Reagent Blank		Quant. Limit	
Lab Sample I.D.	AB23291		AB23292		AB23293		N/A		N/A	
Date of Collection	07/27/99		07/27/99		07/27/99		N/A		N/A	
Units	ug/L		ug/L		ug/L		ug/L		ug/L	
Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	
Perchlorate	5	U	5	U	5	U	5	U	5	

Q - Laboratory Data Qualifiers; Refer to EPA Region 9 Laboratory Qualifier Definitions

QL - Quantitation Limit